

② 2 5327 10. (Amended) The process of claim [9] 1, wherein said step of changing the metallurgical characteristics comprises using a flexible speed control.

REMARKS

The Office Action mailed March 29, 2000 has been reviewed and carefully considered. Claim 9 is cancelled. Claims 6 and 10 has been amended. Claims 6-8 and 10-13 are pending in this application, with claim 6 being the only independent claim. Reconsideration of the above-identified application, as amended, and in view of the following remarks is respectfully requested.

In the Office Action mailed March 29, 2000, claims 9-12 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner stated that the definitions of metallurgical and geometrical characteristics are unclear. The Examiner further states that there is no guidance in the application as to whether these pertain to grain structure or phase changes.

It is respectfully submitted that the metallurgical characteristics of a coil refer to the grain structure and phases present in the coil which determine the physical properties of the coil and the geometrical characteristics of the finished coil refer to the overall dimensions of the finished coil. The specification has been amended to clarify the definitions of metallurgical and geometrical characteristics. Accordingly, it is respectfully requested that the rejection of claims 9-12 now be withdrawn.

Claims 6-13 stand rejected under 35 U.S.C. § 103 as unpatentable over U.S. Patent No. 5,657,814 (Maebara).

Before discussing the prior art and the Examiner's rejections of the claims in view of the prior art, a brief summary of the present invention is appropriate. The present invention relates to a process for producing hot-rolled steel strip from a continuously cast precursor strip in which at least 40 tons of a continuous cast precursor strip is rolled through a first deformation stage to form a continuous intermediate strip. An intermediate coil is formed from the continuous intermediate strip at the output of the first deformation stage. The continuous intermediate strip is uncoiled and fed through a second deformation stage. After passing the second deformation stage, the strip is cut to form finished coils at desired lengths. Accordingly, the entire output of the casting plant is maintained in a continuous strip until after the second deformation stage, at which point it is severed into desired finished coil lengths.

Independent claim 6 recites the following steps: "rolling the continuous precursor strip through the first deformation stage to form a continuous intermediate strip", "coiling the continuous intermediate strip to form an intermediate coil having an intermediate coil weight comprising at least 40 tons", uncoiling the continuous intermediate strip from the intermediate coil to supply a second deformation stage having at least one roll stand, rolling the continuous intermediate strip through the second deformation stage to form a finished strip, and producing a plurality of finished coils from the finished strip by coiling the finished strip and severing the finished strip into sections having a desired finished coil weight after said step of rolling the continuous intermediate strip through the second deformation stage.

It is respectfully submitted that Maebara fails to teach or suggest coiling the continuous intermediate strip to form an intermediate coil or severing the finished strip into sections having a desired finished coil weight after said step of rolling the continuous intermediate strip through the second deformation stage. In contrast to the present invention,


Maebara teaches a two step process for rolling a steel strip in which the steel strip is passed through a preliminary rolling section (II) to form an intermediate strip which is severed before the intermediate strip is coiled. Col. 13, lines 42-50, of Maebara discloses that after the slab has passed through the preliminary rolling section (II), a slab shearing machine 14 is used to cut the preliminary rolled slabs 4 to lengths corresponding to the hot rolled coils. The slab shearing machine 14 is arranged before the slab coiler 15. Accordingly, Maebara fails to teach or suggest the steps of “coiling the continuous intermediate strip to form an intermediate coil having an intermediate coil weight comprising at least 40 tons” or the step of “severing the finished strip into sections having a desired finished coil weight after said step of rolling the continuous intermediate strip through the second deformation stage.” In fact, since Maebara teach that the coil is severed after the first reduction pass and before the coiling of the intermediate slab, Maebara actually teaches away from the claimed invention.

Accordingly, it is respectfully submitted that independent claim 6 is allowable over Maebara. Dependent claims 7, 8, and 10-13, being dependent on independent claim 6, are also allowable for the same reasons that independent claim 6 is allowable.

The application is now deemed to be in condition for allowance and notice to that effect is solicited.

It is believed that no fees or charges are required at this time in connection with the present application; however, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,
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